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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,839	03/19/2007	Neil Paton	53251/L471	7755
23363 CHRISTIE P	7590 08/03/2010 ARKER & HALE, LLP	EXAMINER		
PO BOX 7068			OMGBA, ESSAMA	
PASADENA,	CA 91109-7068		ART UNIT	PAPER NUMBER
			3726	
			MAIL DATE	DELIVERY MODE
			08/03/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.	Applicant(s)		
10/565,839	PATON ET AL.		
Examiner	Art Unit		
Essama Omgba	3726		

	Essama Omgba	3726					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFF 135(6). In one vert, however, may a reply be timely filed after SIX (6) MONTH'S from the mailing date of this communication.  If NO period for reply is specified above, the montions disturbly profit will apply and will expire SIX (6) MONTH'S from the mailing date of this communication.  If NO period for reply is specified above, the montions disturbly profit will apply and visit expire SIX (6) MONTH'S from the mailing date of this communication.  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term deliverance. See 37 CFR 174(b).							
Status							
1) Responsive to communication(s) filed on	ction is non-final. e except for formal ma		e merits is				
Disposition of Claims							
4)   Claim(s) 1-8 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawi  5) □ Claim(s) is/are allowed.  (b) □ Claim(s) 1-8 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or.							
Application Papers							
9)⊠ The specification is objected to by the Examiner.  10)☐ The drawing(s) filed on is/are: a)☐ accept Applicant may not request that any objection to the displayed of the Applicament drawing sheet(s) including the correction.  11)☐ The oath or declaration is objected to by the Example.	rawing(s) be held in abeyon is required if the drawing	ance. See 37 CFR 1.85(a).  ng(s) is objected to. See 37 C					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign p a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Copies of the priority documents 3. Copies of the certified copies of the priorit application from the International Bureau * See the attached detailed Office action for a list o	have been received. have been received in y documents have bee (PCT Rule 17.2(a)).	Application No en received in this National	Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview	Summary (PTO-413)					

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Information Disclosure Statement(s) (FTO/S3/05)

Paper No(s)/Mail Date

Paper No(s)/Mail Date. \_\_\_ 5) Notice of Informal Patent Application 6) Other: \_\_

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#### DETAILED ACTION

### Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

## Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

 The disclosure is objected to because of the following informalities: on page 2, line 16, --to-- should be inserted after "subjected".

Appropriate correction is required.

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# Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filled in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filled in the United States before the invention by the applicant for patent, except that an international application filled under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filled in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Scruggs et al. (WO 97/20601).

Scruggs et al. discloses a golf club face insert made of a bulk-solidifying amorphous alloy (page 6, lines 11-18) having improved durability and fatigue resistance (they are more durable and have a strong load-bearing capability, see paragraphs [0033] and [0034]) comprising an exterior surface and a plurality of deformations in the exterior surface (fig. 1 that shows splines formed on the face as is conventional in the art). Regarding the recitation of the deformations resulting from a mechanical surface treatment process such as laser shot-peening with shots having a diameter of approximately 0.006 inches to 0.040 inches, Applicant should note such recitation amounts to product-by-process recitation and as such has not been given any patentable weight. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in

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the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP §2113. Also it is inherent that the golf club head of Scruggs et al. has improved durability and fatigue resistance since bulk-solidifying amorphous metal are known to be are more durable and to have a strong load-bearing capability when compared to conventional materials used in the art such as titanium alloys.

 Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Opie et al. (US 2006/0149391).

Opie et al. discloses an article made of a bulk-solidifying amorphous alloy (paragraph [0026]) having improved durability and fatigue resistance (they are more durable and have a strong load-bearing capability, see paragraphs [0033] and [0034]) comprising an exterior surface and a plurality of deformations in the exterior surface (paragraph [0038]). Regarding the recitation f the deformations resulting from a mechanical surface treatment process such as laser shot-peening with shots having a diameter of approximately 0.006 inches to 0.040 inches, Applicant should note such recitation amounts to product-by-process recitation and as such has not been given any patentable weight. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different

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process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP \$2113.

## Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be neadtived by the manner in which the invention was made.
- Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et
   (US Patent 6,638,577) in view of Scruggs et al. (US Patent 6,685,577).

Sano et al. discloses a method of surface treating an article made from amorphous alloy by applying a shot-peening process to the surface of the article (col. 2, lines 66-67 and col. 3, lines 1-5). Although Sano et al. does not specifically disclose the article being made from a bulk-solidifying amorphous alloy, however it is known to form such articles from a bulk-solidifying alloy as attested by Scruggs et al., see abstract and page 6, lines 11-18. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have made the article of Sano et al. from bulk-solidifying amorphous alloy, in light of the teachings of Scruggs et al., in order to achieve the benefits of using such known and readily available material, see page 3, lines 1-28 of Scruggs et al. Applicant should note that it is well established that shot-peening creates a plurality of deformations in the exterior surface by mechanically

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compressing a plurality of shots against the exterior surface, ant that such process improves durability and fatique resistance of the article subjected to shot-peening.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30. 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Essama Omgba/ Primary Examiner, Art Unit 3726

eo July 23, 2010